The paragraph beginning on page 27, line 12 is amended as follows:

B. Primers and amplification reactions.

Oligonucleotide primers were made by Genosys Biotechnologies, Inc., Houston, Texas. Gene amplification reactions were performed in 100 µl of 10 mM Tris.HCl, pH 8.3, 50 mM KCl, 1.5 mM $MgCl_2$ 200 mM of deoxyribonucleoside triphosphate, 2.5 units of *taq* DNA polymerase (from *Thermus aquaticus*), 10 ng plasmid pNVLOVHGH (containing the complete NVL3 genome) and 1 µg of each primer. [Note: any suitable VL30 template, such as one of the many cloned VL30 DNA sequences, or mouse genomic DNA, can be used as a template]. Reactions proceeded through 35 cycles of denaturation (94°C for 1 min), primer annealing (56°C for 2 min), and primer extension (72°C for 3 min). In most cases the annealing temperature was 5°C below the calculated denaturing temperature. Sequences of the primers were as follows (5"-3"):

P1-5'-TCAGCAGATCTTGAAGAATAAAAAATTACTGGCCTCTTG-3' (SEQ ID NO:1),

P2-5'-AAGGGCGGCCGCTTAATTAATCCCTGATCCTCCCCTGTTCCTC-3' (SEQ ID NO:2),

P5-5'-ACTGCGGCCGCATAGACTTCTGAAATTCTAAGATTA-3' (SEQ ID NO:3),

P6 5'-GAAGATCTTGAAAGATTTTCGAATTCCCGGCCAATGC-3' (SEQ ID NO:4),

P7 5'-AAGGCGGCCGCTTAATTAATCTAAGGCCGGCCAATTGAGACC-3' (SEQ ID NO:5),

N5 5'-GGTTAATTAATTAGATCTAGCATGATTGAACAAGATGGATTGCAC-3' (SEQ ID NO:6),

N3 5'-TACTTAATTAACCATGGATCCGTTAACTCCGAAGCCCAACCTTTCATAG-3' (SEQ ID NO:7),

N3S 5'-
[']TACTTAATTAACCATGGTCTAGTGGATCCGACCTTGGAGAGAGAGAGTCAGTGTTA
ACTCCGAAGCCCAACCTTTCATAG-3' (SEQ ID NO:8).

The paragraph beginning at page 27, line 3 and continuing to page 38 line 7, is amended as follows:

4. Additional primers made for LTR substitutions

BGL2RU5 5'-TTTAGATCTTCCCTCCCCATTCCCCCTCCCAGTT-3' (SEQ ID NO:9)

3PHETLTR 5'-CGAGGTACCTGAAAGA(CT)(CT)(CT)(CT)CG-3' (SEQ ID NO:10)

MCSP3P 5'-GGGTTCAGATCTTGATCAG-3' (SEQ ID NO:11)

3LTR5MCS 5'-
TAAGCGGCCGCTAGACTTCTGAAATTCTAAGATTAGAATTATTTACAAGAAGAAGTG
GGGAATGAAGAATAAAAAATTCTGATCAAGATCTGAACCC-3' (SEQ ID NO:12)

3LTR5 5'-
TAAGCGGCCGCTAGACTTCTGAAATTCTAAGATTAGAATTATTTACAAGAAGAAGTG
GGGAATGAA-3' (SEQ ID NO:13)

KPN1IRU5 5'-CGAGGTACCTGAAAGATTTTCGAATTCCCGGCCAAT-3' (SEQ ID NO:14)

The paragraph beginning at page 41, line 20 and continuing to page 42 line 22, is amended as follows:

For gene therapy, it would be especially desirable to have a vector which has both high titer as well as strong protein expression. This can be attained by combining AUG start codons with splicing of the 5'-leader sequence. Unspliced vectors are packaged efficiently because translation is frequently aborted. In the recipient cell, processing of a 5'-intron containing AUG codons and packaging signals permit more efficient translation of a protein product, especially if it resulted in the removal of confounding ATG codons. Thus, it would be desirable to have a splice donor and acceptor site in the 5'-end of the RNA which would permit some percentage (less than 100%) of the RNA molecules to be spliced. Ideally, it would be desirable to have efficient splicing in the recipient cell, but not in the producer (donor, or helper) cell. The synthetic vectors shown in FIG. 2 have splice donor site [concensus] consensus sequences just [preceeding] preceding the packaging signal. It is possible to insert a splice acceptor sequence into a unique restriction endonuclease site, such as the *Cla1* site of VLCN or its derivatives, or the *Dra3* site of VLDN. However, in order for this to have greater effect, it is also desirable to mutagenize some or all of the confounding AUG condons which lie outside the splice region. This can be done by using any techniques of site-directed mutagenesis (Ausubel, *supra*; or, for example, using the commercially available kit with manufacturers instructions, Stratagene #200510, LaJolla, CA; ref: Felts, K., *et al.* 1992, Strategies 5:26-28). Alternatively, it is possible to use a splice donor which is farther upstream, for example, in the LTR. To enhance the